

TTCGGATCCTTGGACCTTCCCGGTTCTTCTACCCCATTCTGGCCCTTGAGCCCAGGGAGCGAGGGCAGTG
TGGTTAATGGGGAGAGCCATGCATCCGGGACCACCACTCTCACAGACTGCCTGCGAAGATTTACCAGACC
AGAGCACTTAGGAAGCAGTGCCAAGATCAAGTGTAGCGGTTGCCATAGCTACCAAGAGTCCACAAAGCAG
CTCACCATGAAGAAGCTGCCCATTGTGGCCTGTTTCCATCTCAAACGATTTGAACACTCAGCCAAACTTC
GGCGGAAGATCACCACATATGTGTCTTTTCCCCTGGAACCTGGACATGACGCCCTTCATGGCCTCCAGCAA
AGAGAGCAGGATGAATGGGCAATACCAGCAGCCCCTGGACAGTCTCAACAATGACAACAAATACTCCCTG
TTTGCTGTCGTTAACCATCAAGGGACCTTGGAGAGTGGCCACTACACCAGCTTCATCCGGCAGC
ACAAAGACCAGTGGTTCAAGTGTGATGACGCCATTATCACCAAGGCCAGCATCAAAGATGTACTGGACAG
TGAAGGGTACTACTCTTCTATCACAAACAGTTCCTGGATTACGAGTAGCTCCTGCCTTGCTGGCCAGAGA
AAGAGAGAGA (SEQ ID NO:1)

FIGURE 1

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

TTCGGATCCTTGGACCTTCCCGGTTCTTCTACCCCATTCCTGGCCCTTGAGCCCAGGGAGC
GAGGGCAGTGTGGTTAATGGGGAGAGCCATGCATCCGGGACCACCACTCTCACAGACTGC
CTGCGAAG [ATTTACCAGACCAGAGCACTTAGGAAGCAGTGCCAAGATCAAGTGTAGCGGT
TGCCATAGC] TACCAAGAGTCCACAAAGCAGCTCACCATGAAGAAGCTGCCCATTTGTGGCC
TGTTTCCATCTCAAACGATTGAACTCAGCCAACTTCGGCGGAAGATCACCACATAT
GTGTCTTTCCCCTGGAAGTGGACA [TGACGCCCTTCATGGCCTCCAG] CAAAGAGAGCAGG
ATGAATGGGCAATACCAGCAGCCCCCTGGACAGTCTCAACAATGACAACAAATACTCCCTG
TTTGCTGTCGTTAACCATCAAGGGACCTTGGAGAGTGGCCACTACACCAGCTTCATCCGG
CAGCACAAAGACCAGTGGTTCAAGTGTGATGACGCCATTATCACCAGGCCAGCATCAAA
GATGTACTGGACAGTGAAGGGTACTACTCTTCTATCACAAACAGTTCCTGGATTACGAGT
AGCTCCTGCCTTGCTGGCCAGAGAAAGAGAGAGA

Gene Sequence
Structure *

190 bp

Sequence Deleted

325 bp

Size of EST
contig: 634 bp

FIGURE 2A

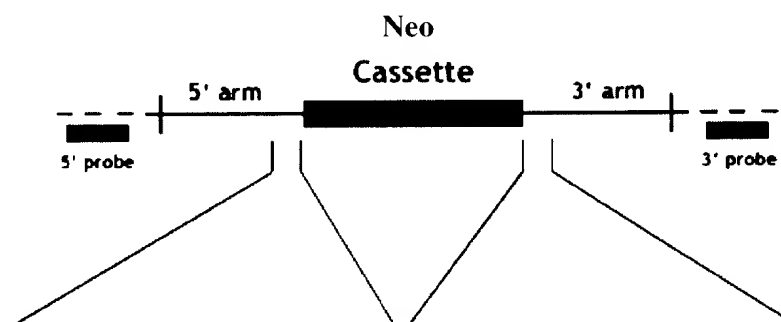
Targeting Vector* (genomic sequence)

Construct Number: 2869

Arm Length:

5': 0.4 kb

3': 3.5 kb



———— Targeting Vector
 - - - - - Endogenous Locus

* Not drawn to scale

5'>AGATGACACCTTTAACTACTG
 GTGAACTTTGAGTGATAAAATAAT
 CTGTTCCTCTTCTTCCATGTCCT
 CATGTCCTTTTACTTTTCCCTTTC
 CATGTTTATTTTTTAATAAAAAC
 ACGTTTTFAAAATGCCCTTGTAGAT
 TTACCAGACCAGAGCACTTAGGAA
 GCAGTGCCAAGATCAAGTGTAGCG
 GTTGCCATATC<3' (SEQ ID
 NO: 2)

5'>TGACGCCCTTCATGGCCTCCA
 GGTAGAAAGGTTGGTGCTCCTGT
 GTCTGAGTGGGAAGGCAAGTTGTC
 TAGTGGGTGCTTACCCAGTGCCAG
 CCTTTAGACATGGTAATGACAGCT
 ATCCAGGCCTCACCGCCACCCAG
 AACTTACCTAAGCTTACTGTGGGC
 TACCCATTTGTACTCTTAACATCC
 CTCATCATTTA<3' (SEQ ID
 NO: 3)

FIGURE 2B